



ISSUED FROM THE U. S. PATENT OFFICE, FOR THE WEEK ENDING MARCH 26, 1867.

Table listing fees for patent applications: On filing each caveat, On filing each application for a Patent, except for a design, On issuing each original Patent, etc.

PATENTS ARE GRANTED FOR SEVENTEEN YEARS, the following being a schedule of fees—

63,131.—MACHINE FOR MAKING EYELETS.—Samuel W. Adams (assignor to the American Eyelet Company), Providence, R. I. Antedated March 12, 1867.

First, I claim the improved mode of constructing and operating the compound male cutter, 3, 1, 2, and punch, 1, as described for the purpose specified.

63,132.—SEWING MACHINE.—Frank Armstrong, Waterbury, Conn.

First, I claim constructing the plate, A, of the attachment with the slot or aperture, B, whereby the said attachment can be readily adjusted and secured upon the machine and removed therefrom, substantially in the manner set forth.

63,133.—PERMUTATION LOCK.—George B. Atwood (assignor to Alfred A. Oat), Philadelphia, Pa.

First, I claim making the plug, B, cylindrical and with an annular groove, b2, therein, substantially as and for the purposes described.

63,134.—SHOVEL-PLOW GUARD.—William J. M. Batchelder, Dayton, Ohio.

I claim the shovel-plow guard, E, when constructed substantially as herein described and for the purpose specified.

63,135.—BEE FEEDER.—James M. Beebe, Casadaga, N. Y.

First, I claim the construction of a bee feeder with an apartment for sugar liquid and an apartment for water provided with racks or floats, E, and an apartment for flour or other food, with a central passage way, C, and door, H, all combined substantially as described.

63,136.—COTTON GIN.—John B. Brackett, and Wyman Dearborn, Boston, Mass.

First, We claim the rolls, C C', constructed as described, as arranged with the belt, D, in combination with the sliding bearing, J, and levers, L, with their various fulcras, substantially as and for the purpose described.

63,137.—STEAM GENERATOR.—W. Buchanan, New York City, and J. M. Toucey, Poughkeepsie, N. Y.

First, We claim the divided fire-box, B C, when constructed and arranged substantially as and for the purposes herein set forth.

63,138.—MANUFACTURE OF STONE WARE.—Edgar T. Chapman, Middlebury, Ohio.

I claim a crock, constructed as hereinbefore described, being a new article of manufacture.

63,139.—GRAIN SHOVEL AND HANDLER.—Fayette Clark, Marcellus, N. Y.

I claim the principle of putting the labor of handling grain equally upon both hands, it being in shape like the accompanying drawing or any other shape substantially the same and which will produce the same effect, namely, the placing of the weight of grain equally on both hands.

63,140.—FENDER FOR CORN PLOWS.—Robert Cook, Franklin, Ohio.

I claim, first, The yielding and adjustable fender, D, attached to a plow beam by mechanism, substantially as and for the purpose specified.

63,141.—COMBINED NAME PLATE AND LETTER SLIDE.—J. M. Combs, Boston, Mass.

I claim the combined arrangement as and for the purposes set forth of a name plate pivoted to a flange which has a metallic chute fixed thereunto by which the flange and plate are held to the surface by which the back of said name is in contact.

63,142.—SCAFFOLD.—Charles Crow, Onarga, Ill.

I claim, first, The combination of the jointed rack, H, jointed standards, F, and bars, V, when constructed to operate the platforms, Z, substantially as set forth.

63,143.—HAND-POWER LOOM.—J. M. Dean, W. B. Bolding and H. Perry, Dayton, Iowa, assignors to themselves and E. G. Whetstone.

We claim, first, Operating the treadles, H H, by means of the levers, F and G, joined connecting rod, E, the feed hand, b, and ratchet, c, with the wipers, d, arranged and combined with the batten, B, in the manner and for the purpose set forth.

63,144.—HOOP FOR SKIRTS.—Thomas B. De Forest, Birmingham, Conn.

I claim hoops for skirts formed by the introduction of elastic metallic wires in the fabrication of the hoop, substantially as described, as a new article of manufacture.

63,145.—HOOP SKIRT.—Thomas B. De Forest, Birmingham, Conn.

I claim securing the hoop and tape by one or more indentations or enlargements of the hoops, substantially as herein set forth.

63,146.—APPARATUS FOR HATCHING EGGS.—Peter Degive, New York City.

I claim the screw, C, and rod, D, or its equivalent in combination with the train of gears, E, the door or damper, G, and hatching box, K, substantially as and for the purposes described and set forth.

63,147.—SEED PLANTER.—James Edge, Acquackanonk, N. J.

I claim, first, The movable throat, s, at the base of the seed hopper, in combination with the seed-measuring disk, o (made changeable), and with the seed tube, d, as and for the purposes specified.

63,148.—STEAM MOTOR FOR TOYS.—Philip Ely (assignor to J. M. Keep & Co.), New York City.

I claim the revolving boiler, C, provided at the center of its concave bottom with a conical projection, b, which is fitted on the rod, B forming the bearing for the boiler and having its upper end the arms, D, and adapted to bear the strap or band, F, by which motion is communicating to the toy, E, as and for the purpose described.

63,149.—FEEDING MECHANISM FOR SEWING MACHINES.—George A. Fairfield, Hartford, Conn.

I claim the combination of the eccentric, H, operating upon a regulating lever, K, rocking shaft, L, cam, F, and feed bar, N, or their equivalents, to produce a uniform feed, substantially as described.

63,150.—GRATE FOR STOVES.—Moses P. Farnham, Janesville, Wis., assignor to self and Daniel P. Farnham.

I claim, first, The supplemental fire box, A, for stoves and furnaces having a movable bottom or grate, B, that may be placed on different bearings, B, substantially as and for the purposes described.

63,151.—PLOW.—Joseph Fowler, Hartland, Wis.

First, I claim adjusting the draft vertically by the wedge, n, beneath the cross pin or T-front end of the plow standard in combination with the wedge, l, to clamp the standard in the beam, as set forth.

63,152.—PUMP.—Andrew Fuller and Francis J. Bray, Buffalo, N. Y.

We claim the elastic strips, A B and B, in combination with the staff, A and sucker, H, substantially as described.

63,153.—BED BOTTOM.—George L. Gerard, New Haven, Conn.

I claim the combination of the clamp bolt, D, with the slotted spring, A, and the bar, C, constructed so as to operate in the manner described.

63,154.—RAKE.—Benj. F. Gladding, Providence, R. I. Antedated March 10, 1867.

First, I claim constructing the rake head double or of two pieces of metal secured together, substantially in the manner described for the purpose specified.

63,155.—APPARATUS FOR REGULATING THE EXHAUSTER IN GAS WORKS.—Joseph A. Harris, Philadelphia, Pa.

First, I claim the within-described regulator consisting of a vessel inclosing two chambers partly filled with water communicating with each other and one chamber communicating with the main pipes, through which gas is exhausted from the retorts while the other chamber has a float connected to the throttle valve of the steam engine which drives the fan or other exhausting device, all substantially as set forth.

63,156.—BRIDLE BIT.—William B. Hayden, Columbus, Ohio.

First, I claim a bridle or harness bit which has its rein rings attached to the mouth piece by passing the check pieces through solid eyes formed on said parts substantially as described.

63,157.—SASH FASTENER.—Gustave Franz Hedrich, Buffalo, N. Y.

I claim the improved fastener consisting of the combination of the sliding knob, H, or its equivalent, pivot, E, C, provided with the bolt G, and spring, e, arranged and operating substantially as set forth.

63,158.—ELECTRIC CIRCUIT-BREAKING CLOCK.—Edwin Holmes, New York, N. Y.

I claim the combination as well as the arrangement of the circuit breaker B, its adjuster C, and the spring D, with a clock or time piece A, and an electric or electro magnetic circuit, the whole being substantially as and for the purpose hereinbefore specified.

63,159.—METHOD FOR MAKING DIES FOR FIGURES IN PRESS DYED FABRIC.—John Holt, Lowell, Mass.

I claim the method substantially as herein described of making the impression dies which produce the figures in press dyed fabric.

63,160.—ORE CRUSHER.—Bennet Hotchkiss and S. C. Goodsell, New Haven, Conn.

We claim, first, The shaft F, with double cranks I I straps L and L', hammer C, box O, when constructed and arranged to operate together substantially as described.

63,161.—RAILWAY TRACK.—B. B. Hotchkiss, New York, N. Y.

I claim the construction and arrangement of a street railway track in sections consisting of the cast iron cellular base parts in which are inverted blocks of wood fitting therein with the rails arranged upon the outer sides of said track, and held in position as herein set forth.

63,162.—PAVEMENT.—B. B. Hotchkiss, New York, N. Y.

First, I claim fitting wood blocks in cast iron cells or cavities by employing blocks of less size than the cells and driving a packing H into the spaces between the blocks and the sides of the cell, substantially as and for the purpose herein specified.

63,163.—EXTENSION LADDER.—Geo. L. Johnson, Fairfield, N. Y. Antedated March 15, 1867.

I claim the combination of the hook A, of the slide B, and socket C, all constructed, arranged and operating in the manner and for the purpose specified.

63,164.—NECKTIE.—George A. Keene, (assignor to himself and Jos. E. Manning), Boston, Mass.

I claim fastening wing piece, knob band and tie strip together and attaching the elastic ring by means of the clinch bar, as shown, illustrated and described.

63,165.—MACHINE FOR GRINDING CARDS.—S. G. Ladd and G. W. Crown, Lowell, Mass.

We claim the two central shafts A C, revolving at different velocities, causing the grinding cylinder to revolve by means of the hub, d, and to reciprocate longitudinally by means of the hub k, groove g, pin h, slot f, and pin e, in the manner and for the purpose substantially as described.

63,168.—FOUNTAIN PEN.—George R. Melten, St. Louis, Mo., assignor to Horace Baldwin, Painesville, Ohio.

In combination with an air-tight and flexible ink sack, which is applied within the handle or holder of a fountain pen, so as to be free to collapse as the ink flows from it, I claim a tube e, which extends beneath the pen, f, and is provided with a valve, g, at the point of discharge, so that in the act of writing the ink shall be caused to flow to the pen, with greater or less freedom according to the force and rapidity of the strokes, substantially as specified.

63,169.—CURTAIN FIXTURE.—Purche Miles, New York, N. Y. Antedated March 15, 1867.

I claim the cord holder g, in combination with a cord for curtain fixtures, upon which cords are knots or projections substantially as and for the purposes specified.

63,170.—ASH SIFTER.—Charles F. Meyer, Troy, N. Y.

First, in combination with a revolving drum sifter D, and right and left inclined fixed guide plates H and H', I claim the reversing or shifting guide plate E, constructed and arranged substantially as described and operating in the manner and for the purpose as set forth.

63,171.—KNIFE AND WATCH KEY COMBINED.—E. Q. Morton, (assignor to himself and Alpheus Patten), Bangor, Maine. Antedated, March, 13th, 1867.

I claim as a new article of manufacture the aggregation of the pen knife blade and watch key in one handle as set forth.

63,172.—CROSS BOW.—Edward C. H. Nye, Ascushnet, Mass.

I claim the combination of the cross bow, the arrow magazine and a mechanism for setting and discharging the cord of the spring of the bow the whole being substantially as hereinbefore described.

63,173.—ROUNDING JACKS FOR TRIMMING BRIMS OF HATS.—Starr Polley, (assignor to Ambrose Hill), Brooklyn, N. Y.

First, I claim the cutter b, the head b1, adjusting screw C, removable bearings M, and conning means D combined and arranged for joint operation on the sliding block B, of the brim cutting instrument, substantially in the manner and for the purpose herein set forth.

63,174.—PROCESS FOR TREATING INDIAN CORN.—E. F. Prentiss, Philadelphia, Pa., and C. C. Parsons, Boston, Mass.

We claim the process of treating Indian corn in the manner and for the purposes substantially as described.

63,175.—PREPARATION FROM INDIAN CORN.—E. F. Prentiss, Philadelphia, Pa., and C. C. Parsons, Boston, Mass.

We claim the preparation from Indian corn, made substantially in the manner described.

63,176.—COTTON CHOPPER.—Koscisko Puckett, Parish of Morehouse, La.

I claim the combination of the driving wheel A, the balance wheel G, plow B, shaft C, and hoe D, with the frame E, and its appurtenances when the several parts are arranged and constructed as described for the purposes set forth.

63,177.—MACHINE FOR EMBOSsing ARTICLES OF WEARING APPAREL.—George W. Ray, Springfield, Mass.

First, I claim the roll c, covered or partially covered with a woven fabric in combination with the roll d, substantially as described, and for the purpose set forth.

63,178.—CARPET BAG.—E. A. G. Roulstone, Roxbury, Mass.

I claim in combination with the corners d, made by lapping the metal, the head e, extending around these corners and along the angle of the frame substantially as set forth.

63,179.—CARPET BAG.—E. A. G. Roulstone, Roxbury, Mass.

I claim the manner of connecting the flexible bag material to the frame by means of the strip d, and the frame groove b, the strip and cloth or leather, being first united and then connected to the frame as herein set forth and described.

63,180.—SIFTER FOR SAND, ETC.—Samuel C. Rundlett, Portland, Maine.

I claim the sieve j, when suspended by the four chains i, and so operated by the means hereinbefore described as to swing from side to side and at each motion to strike the inner side of the frame A, as and for the purposes specified.

63,181.—SCRUBBING BRUSH.—S. C. Rundlett and R. Dodge, (assignor to themselves and John L. Meserve), Portland, Maine.

We claim a scrubbing brush having the arrangement of the jointed handle c, and rubber band f, as and for the purposes set forth.

63,182.—SHAFTING COUPLING.—Silas C. Schofield, Chicago, Ill.

First, I claim providing the coupling forks or heads B, with gudgeons or their equivalents D, substantially as and for the purposes specified.

63,183.—HEMP BRAKES.—Simeon Sherman, Weston, Mo.

I claim the endless chains provided with bars or slats and operating in connection with the reciprocating rotary beaters, substantially as described.

63,184.—MEANS FOR PROPELLING CANAL BOATS.—Greenleaf Stackpole, New York, N. Y., assignor to himself and T. Spear, Jersey City, N. J., and Cyrus and Darius Cobb, Boston, Mass. Antedated March 13, 1867.

I claim the wheels g, l, and clamp k, l, in combination with the radius arm b, horizontal driving shaft a, boat A, and rail b, constructed and operating substantially as and for the purpose described.

63,185.—PISTON PACKING.—Theodore Thurber, Auburn, N. Y.

First, I claim the construction of the internal ring plate A, with ring cap B, fitted, leaving a steam chamber or recess, a between them and the metal ring packing c, so that it can be put in its place without opening or expanding substantially as described.

63,186.—IRONING MACHINE.—William M. Tobey, New London, Conn.

I claim the shirt bosom ironing-machine made substantially as, and to operate as described, viz: of the chambered polisher (to be heated as described) the mechanism to operate or move such polisher, the platform for supporting the work, the mechanism for moving such platform laterally and vertically in manner as specified the whole being applied to a frame and so operate substantially as hereinbefore explained.

63,187.—WEATHER STRIP.—L. W. Turner, (assignor to himself and G. S. Wilcox), Yalesville, Conn.

I claim the combination of the lever D, with two sections A B, spring E, when the two sections are arranged so as to be operated simultaneously, substantially in the manner described.

63,188.—EXTENSION LADDER.—Calvin G. Udell, Chicago, Ill.

First, I claim, in combination with a section or sections of an extension ladder, the pivoted catches, D, arranged and operating substantially as and for the purpose specified.

63,189.—SAND TRAPS FOR WATER PIPES.—Joseph D. West, New York City.

I claim the gauze or perforated diaphragm check, A, or its equivalent, in

Seiver, C, hollow disk, B, or its equivalent, and induction pipe, D, whether provided with a valve cover or not, when all combined and arranged to perform so as to operate substantially in the manner and for the purpose described.

63,190.—CAR TRUCK AND SPRINGS.—Levi H. West, Cambridge, Mass.
I claim the combination as well as the arrangement of the additional levers, D, D', the springs, F, F', and supporting rods, c, c', with the platform, A, the wheel boxes, a, a, and the levers, B, B', rods, c, c', and springs, F, F', and the combination as well as the arrangement of the springs, F, F', and the suspension rod, c, with the lever, D, the wheel box, a, and the platform, A.

I also claim the combination as well as the arrangement of the hanger, I, and the staple, h, with the platform, A, the wheel box, a, and the supporting levers, D, or D', applied to such box and platform.

I also claim the combination as well as the arrangement of the springs, I, with the hanger, I, the box, a, the platform, A, and the supporting levers applied to such platform and the wheel box or boxes, the whole being substantially as hereinbefore specified.

63,191.—MACHINE FOR SHAVING HIDES.—T. F. Weston, Salem, Mass.
I claim the use of the cutting, shaving, or scraping tool, having such motion imparted to it by any suitable arrangement of mechanical devices as to produce a drawing cut upon the surface of the leather, as hereinbefore set forth and for the purpose specified.

63,192.—HARVESTER.—William N. Whitely, Jun., Springfield, Ohio.
First, I claim the rake guide rail, N', and arch, S', when attached to the main frame by a bolt in front of the cutting apparatus, and another bolt behind the said cutting apparatus, and without any connection with the platform, substantially as described and shown.

Second, I claim in combination with the internal gear wheel, J, and its driving pinion, M, the pitman, K, and rake, Q, substantially as and for the purpose set forth.

Third, The combination and arrangement of the sector plate, C, curved standard, D, and standard, E, substantially as described.

63,193.—FRUIT JAR.—B. B. Wilcox, New Haven, Conn.
I claim the yoke, D, and divided ring, C, in combination with a jar, A, and cover, B, when constructed and arranged so as to operate in the manner herein set forth.

63,194.—TAKE-UP FOR BRAIDING MACHINES.—Gilman K. Winchester, Providence, R. I.
I claim the adjustable feed or take-up stand, so constructed as to be readily moved forward and backward to allow a larger or smaller worm wheel to be placed upon the feed-roll shaft to connect with the worm upon the worm shaft, substantially as and for the purpose set forth.

63,195.—COMPOUND FOR THE CURE OF GLANDERS ETC., IN HORSES.—John Althouse, East Cocalico Township, Pa.
I claim the composition of powder for the cure of glanders and farcy in horses, when combined and administered substantially in the manner specified.

63,196.—STOVE-PIPE DAMPER.—T. K. Anderson, Hornellsville, N. Y.
I claim the pivoted damper, B, stop, D, tube, E, and weighted lever, F, or its equivalent, combined to operate together, and arranged with the stove pipe, A, substantially as described for the purpose specified.

63,197.—MANUFACTURE OF MATCHES.—Emery Andrews and William Tucker, Fiske Dale, Mass.
We claim notching and dipping the cards preparatory to cutting the matches therefrom, substantially as and for the purpose specified.

63,198.—COMBINED STEAM AND AIR ENGINE.—John B. Atwater, Chicago, Ill.
First, I claim a desiccating or superheating chamber, E, which is combined with a steam boiler, and adapted for receiving and desiccating steam mixed with air, substantially as described.

Second, The combination of chamber, D, when arranged in a steam boiler and supplied with air, substantially as shown, so as to effect the combustion of the gases, after they have escaped from the fire box or chamber, substantially as described.

Third, The air injector operating upon the principle specified, in combination with a desiccating chamber, E, substantially as described and for the purpose specified.

Fourth, The arrangement of the steam generators, C, C', with steam communications, B, leading into generator, C, above the water level therein, with respect to the desiccator, E, substantially as and for the purpose described.

Fifth, The desiccator, E, constructed as described, arranged within the circle of tubes for the purpose set forth.

Sixth, The valve, L, on the end of pipe, Z, in combination with apparatus constructed and operating substantially as described.

Seventh, The combination of an air chamber, G, and cock, P, with an apparatus constructed and operating substantially as described.

63,199.—ROTARY HARROW.—Caleb Bates, Kingston, Mass.
I claim the combination and arrangement of the arms, b, axis, d, perforated rear bars, e, curved bar, E, and swinging blades, F, constructed and operating substantially as described for the purpose specified.

63,200.—TREE DIGGER.—Joseph H. Black, East Windsor, N. J.
I claim the employment of the plate, C, constructed substantially as represented and used in combination with the beams, A, A', as and for the purpose set forth.

63,201.—ELECTRO-MAGNETIC APPARATUS FOR REGISTERING VOTES.—John Blackie, New York City.
I claim, First, The combination of a series of hollow magnets for ejecting the balls as described, with the receiving troughs, c, and tubes, B, arranged to operate substantially as shown and described.

Second, In combination with the tubes, B, open at their lower ends, I claim the drawer, D, provided with the stop, n, when arranged to operate as herein described.

63,202.—RAILROAD FROG.—N. P. Bowler, Cleveland, Ohio.
I claim making railroad frogs by the method and in the manner substantially as and for the purpose specified.

63,203.—VENT PEG AND VALVE FOR CASKS.—Stephen Bourne, Headstone Drive Harrow, England.
I claim a valve made of india-rubber or other elastic or suitable material, whether in the form of a disk cone cylinder or any other proper shape, when said valve is provided with one or more perforations, slits, or other openings, in such a manner that by the distension of the valve its perforations will be opened, but closed by its elasticity, substantially as and for the purposes described.

63,204.—DOOR LOCK.—Edward W. Brettell, Newark, N. J.
First, I claim the encasing of a series of self-acting vertical-sliding tumblers, with their operating dog, within an independent detachable case, substantially as herein shown and described.

Second, The dog, a, attached to the lever, B, so as to act independently of both the bolt and the lock case, substantially as herein shown and described.

63,205.—SHEARS FOR BRUSHES.—Charles Brombacher, New York City.
I claim the triangular opening in the bed shear, a, in combination with the shearing blade or blades, b, hinged directly to the shear, a, and acting as a clamp and cutter, as specified.

63,206.—INSULATOR FOR TELEGRAPH WIRES.—David Brooks, Philadelphia, Pa.
I claim the metal casing, A, insulating block, B, and stem, C, arranged and constructed as described, when the same are combined with arms or holders, b, b, so arranged that the distance between the holders and the case is less than that between the stem and the case.

63,207.—REST FOR GRINDING TOOLS.—James H. Brown, Berea, Ohio.
I claim the stem, A, adjustable sides, D, pivoted to the arms, C, in combination with the arms, B, hooks, G, and staple, b, provided with screws as and for the purpose set forth.

63,208.—POWDER MIXER.—Jabez Burns, New York City.
I claim the spiral flanges, f, f', running in opposite directions, in combination with the movable head, c', drum, A, and standards, B, with hand friction rollers, constructed and operating substantially as and for the purpose set forth.

63,209.—AIR PUMP.—Daniel Carpenter, Peekskill, N. Y.
First, I claim the mechanism herein shown and described for operating the valve, E, automatically by the same power which operates the piston, so that the valve is opened and closed and the piston raised and lowered, substantially in the manner herein set forth.

Second, I claim the piston, F, and valve, E, when so constructed that the piston fits perfectly over the valve, so that all the air is completely forced out of the cylinder, A, at each stroke of the piston through the valves, c, c', substantially as herein shown and described.

Third, I claim the perforated piston, F, in combination with the ring, d, and conical plugs, c, c, all made and operating substantially as herein shown and described.

Fourth, I claim the arrangement in the chamber, B, below the valve, E, of the valve operating parts, substantially as and for the purpose herein shown and described.

Fifth, I claim the box, G, when constructed as herein shown and described, and when provided with braces, H, A, and K, all made as set forth, in combination with the pipe, f, and air pump, A, B, the latter being made and operating substantially as herein shown and described.

63,210.—WASHING MACHINE.—C. L. Carter, Union, Ind.
I claim the arrangement of the perforated box, C, and compressor, D, K, and the strap, G, constructed and operating in the manner and for the purpose herein specified.

63,211.—BROOM HEAD.—Orlando L. Castle, Upper Alton, Ill.
First, I claim the use and employment of a spring, B, for the purpose and operating substantially as the manner herein set forth.

Second, A combination of the spring, B, the wedge, C, and the nuts, n, n, with the shaft, A, arranged and operating substantially as herein described and for the purpose herein set forth.

63,212.—MODE OF ELEVATING HAY FORKS.—John H. Chapman, Utica, N. Y.
First, I claim in a hay-fork elevating apparatus, or the like, the post, A, in combination with the draft rope, G, and ground pulley, H,

Second, The pulley, E, and the casting-off plate, F, constructed and operating in combination substantially as described.

63,213.—WOOD-TURNING LATHE.—James Chase, Rochester, N. Y.
First, I claim the employment of a pattern knife or cutter in wood-turning lathes, rotating upon an axis, arranged at right angles or nearly so to the stick or timber which is being turned, and so geared to the frame of the lathe as to leave its pattern upon the stick, substantially in the manner and for the purposes set forth.

Second, The employment of the pivoted box, M, which constitutes the axial bearing for the knife journal or shaft, N, when the parts are arranged and operate substantially in the manner and for the purposes herein shown and described.

63,214.—DOOR LOCK.—S. L. Chase, New York City.
I claim, First, The circular ward, e, on the disk, b, substantially as and for the purpose set forth.

Second, The bridge, h, in the circular ward, substantially as and for the purpose set forth.

Third, The partition, I, in the circular ward, as and for the purpose described.

Fourth, The nose, f, on the disk, b, in combination with the key, the pins, c, c', d, d', the tumblers, g, and with the bolt, all constructed and operating substantially as and for the purpose set forth.

63,215.—APPARATUS FOR CARBURETING AIR, ETC.—William H. Clarke, St. Anthony's Falls, Minn.
I claim, First, The arrangement of the plates, I, I, in the cylinder, B, and providing the same with air pipes, b, b, supply pipes, M, M, discharge pipes, L, L, and gas transmitting pipes, J, J, substantially as and for the purpose specified.

Second, The combination with the cylinders, A, and B, float, C, bellows, T, and tank, O, provided with lime and cotton as and for the purpose specified.

Third, The arrangement of the pipe, H, with the pipe, P, for supplying heat to the machine from its own gas, substantially as specified.

63,216.—CHURN.—Joseph C. Clymer, Galvin, Ohio.
I claim in a churn the cover, F, and its channel, c, arranged and operating as described and set forth, in combination with the stuffing box, G, key, H, stirrups, I, and adjustable lever, E, substantially as and for the purpose set forth.

I claim the channel, c, in a churn cover, arranged and operating as and for the purpose described.

63,217.—BRECH-LOADING FIRE-ARM.—J. W. Cochran, New York City.
I claim, First, The sliding breech piece, A, and swinging brace, B, jointed together at a, and arranged for operation substantially as shown and described.

Second, The arrangement of the elastic packing, D, with or in the movable breech at its forward end, operating not only to hold said breech when closed and make tight its joint in iron, but serving without restraining the said elastic packing to prevent concussion of the latter against the gun chamber on closing the breech essentially as specified.

Third, The cartridge shell extractor, F, constructed with its rear end inclined or beveled on its upper and lower sides, as at h, operating in connection with the inclined recess, i, in the rear end of the receiver, c, substantially as and for the purpose set forth.

Fourth, The sliding rod, H, with its forward lip, n, and rear projection or head, k, hinged and arranged for operation, in combination with the brace, B, hammer, G, and detaching pin, I, substantially as specified.

63,218.—METHOD OF OPERATING RAILROAD SWITCHES.—Gilbert M. Cole, Folsom City, Cal.
I claim, First, The mechanism herein described for rendering a railroad switch absolutely self-adjusting as a train approaches it on either branch of the double track, in combination with the mechanism herein described, by which the engineer can render the switch self-adjusting as the train approaches.

Second, I claim the levers, b, b', the pinion, a', the sector, d, shaft, c, and crank, c', in combination with the levers, a, a', pinion, a, sector, d', and the loose wheel, b'', on the shaft of the locomotive truck, all constructed, arranged, and operating substantially as described.

63,219.—CORN PLANTER.—A. M. Corbit, Bethlehem, Iowa.
First, I claim the combination of the plate, K, with the plate, L, and set screw, M, for the purpose of regulating the amount of seed through the holes, c, c, all made and operating substantially as herein shown and described.

Second, I claim the cross bars, D, T and G, which are so made and provided with holes that the scrapers, E, plates, K, and seed boxes, L, may be moved forward or backward, so as to regulate the planting of the corn rows of suitable distances from each other, substantially as herein shown and described.

63,220.—MACHINE FOR SOLDERING METAL CANS.—Edward T. Covell, Brooklyn, N. Y.
I claim my improved soldering apparatus, consisting of a supporting plate, B, combined with a suitable soldering pan, A, constructed and arranged substantially in the manner and for the purpose herein set forth.

63,221.—AMALGAMATOR.—Francis W. Crosby, New York City.
I claim grinding or triturating pulverized ores when submerged in a bath of quicksilver or molten lead, substantially in the manner and for the purpose herein set forth.

I claim also the combination of one or more grinding plates or surfaces with the bottom of an ore supplying chamber and an enclosing bath of quicksilver or molten lead, substantially in the manner and for the purpose herein specified.

I claim also the combination of a hollow column or pillar, O, with the bottom of an amalgamating vessel, H, and an enclosing furnace, H, substantially in the manner and for the purpose herein set forth.

63,222.—COMBINED SHEEP HOLDER AND WOOL TYER.—A. M. Culver, Bedford, Ohio.
I claim the sides of the table, C, L, as arranged in combination with the strap, K', and lever, S, for the purpose and in the manner described.

Second, The arrangement of the sides, C, L, and strap, K, in combination with the table, C, suacale, J, bar, H, and lever, I, as and for the purpose herein set forth.

63,223.—CARRIAGE.—John Curtis, Cincinnati, Ohio.
First, I claim the bent strip, B, C, D, E, of elastic timber forming the sills of the body proper and to take the place of the spring bar and body loops, as and for the purpose set forth.

Second, The bent and rebated strip of timber, L, N, N', discharging the functions of the double perch and of the upper member of the fifth wheel as set forth.

Third, The arrangement of strap, F, screw, Q, and gland R, to enable the members of a fifth wheel to beset up as they wear, in the manner specified.

Fourth, In the described combination with the elements of claim 3d, I claim the pad or cushion, S, for the purpose stated.

63,224.—ROLLERS FOR PULVERIZING SOIL AND CLODS.—John Cluster, Corsica, Ohio.
I claim the continuous single ring cutters, s, s, secured by projections, a, a, in grooves, e, e, upon the periphery of the rollers, D, D, arranged as and for the purposes herein described.

The cleaners or scrapers formed of a corrugated metal plate secured to the cross bar, F, with the corrugations or volutes, c, c, placed between the cutters, s, s, in the manner and for the purpose described.

63,225.—SPINNING BOBBINS.—J. Davis and S. W. Foster, Lowell, Mass.
We claim moving a portion of the lower end of the quill and slitting the end as shown that thereby forming the annular space, and the parts, d, j, which act against the surface of the spindle, all substantially as and for the purpose set forth.

63,226.—STEAM GENERATOR.—R. W. Davis and D. Davis, Long Island City, N. Y.
First, We claim the arrangement, over the body of the boiler and within the smoke box, of a series of circle of superheating spheres, G, connected and applied to circulate or pass the steam received from the boiler successively through them, substantially as specified.

Second, The combination with a steam drying chamber or dome, E, of a series of circle of superheating spheres, G, both arranged within the smoke box of a vertical boiler for operation in connection with each other and with a steam generating space or chamber below, essentially as described.

Third, The combination with the smoke box and body of the boiler, of an inner series of superheating spheres, G, and an outer series of superheating spheres, G, the inner series having their draft contracted relatively to the outer series, essentially as and for the purposes herein set forth.

Fourth, The combination of the superheating spheres, G, arranged as described, smoke box, D, and outer row or series of smoke tubes, C, arranged relatively to the spheres, substantially as specified.

63,227.—AUTOMATIC BOILER FEEDER.—Henry O. Demarest, New York City.
I claim the oscillating chambers, C, C', with apertures c, c', in combination with the seats, B, B', apertures, d, d', pipes, e, g, and injector, h, j, k, all constructed and operating substantially as and for the purpose described.

63,228.—HAMMER.—Robert Devereaux, Buffalo, N. Y.
I claim attaching a hammer or analogous tool to its handle by means of the plate, A, which is attached to the handle, and applied to the handle as described, in combination with the recess, d, in the eye of the hammer to receive the plate, substantially as set forth.

63,229.—BURNING OIL.—Henry C. Dewitt, St. Louis, Mo.
I claim, First, The mixture reformed from and by action of the ingredients, A, B, C, D, E, and F, substantially as described and as set forth.

Second, The mixture reformed from and by the action of the ingredients, A, B, C, D, E, F, G, H, and I, substantially as set forth.

63,230.—LOCKS.—Walter Dickson, Albany, N. Y.
I claim, First, The arrangement of the tumbler, H, to operate within the hollow spindle, E, substantially as herein specified.

Second, The combination of the tumbler, H, within the hollow spindle and the key inserted into the end of the said spindle and penetrating into the end of the said tumbler, substantially as herein specified.

Third, The stump, G, arranged in connection with the bolt, C, and in relation with the hollow spindle and the tumbler, H, within the spindle, substantially as herein specified.

Fourth, The application to a lock of a key having its body formed of a true spiral twist like that of a screw augur with a matrix corresponding thereto formed within a movable block or blocks, the key passing through said matrix to act on the follower in the manner and for the purpose specified.

63,231.—CLOTHES PIN.—William M. Doty, New York City.
I claim the wire clothes pin, A, having the arm, b, doubled and secured thereto as at b', forming a loop, the arm, a, passing through said loop and

resting upon cross piece, b' whereby any lateral movement is prevented, as herein set forth.

63,232.—SAWS.—J. E. Emerson, Trenton, N. J.
First, I claim the springs as shown at B or E, either as a part of the saw plate itself, or made separate and firmly attached and fastened to the saw plate or cutter disk when used for holding the teeth or cutters as herein described.

Second, I claim the combination of the saw plate, and the spring as shown at B or E, when made separate from said plate with the tooth, C, when fitted and arranged substantially as described and for the purposes set forth.

63,233.—HOOP SKIRTS.—August Fellheimer, New York City.
I claim the looped ends to the hoops of the skirt, of that class hereinabove referred to and substantially as and for the purpose specified.

63,234.—HOOP SKIRT.—Lewis Fellheimer, New York City.
I claim the skirt with the lower hoops, passing entirely around the skirt and the upper ones secured to the stay, a, and provided with the gathering, b', attached to the waist band and having at its rear the trailing device, consisting of the bands, C, strings, d, and band, u', when all parts are combined and arranged in the manner herein represented and described.

63,235.—PUMPS.—Eli Flanegin and A. B. Smith, Pittsburgh, Pa.
We claim the floating weight, P, counter weight, Q, pinion pulley, N, rack bar, M, and balance weight, L, arranged and operating together, substantially as and for the purpose herein specified.

63,236.—MEAT SLICER.—Albert M. Force (assignor to himself and A. H. Vaughn), Norwich, Conn.
First, I claim the outwardly flaring bar, F, secured to the holder, A, operating in combination with the adjustable slotted knife, K, substantially as and for the purpose specified.

Second, The slicer, the part of which consist of the handle, B, holder, A, outwardly flaring bar, F, slotted knife, K, set screw, s, set screws, i, substantially as described.

63,237.—HOT BLAST APPARATUS FOR FURNACE.—Job Froggett, Youngstown, Ohio.
I claim a hot blast arrangement whereby the air is heated by passing through cylinders which are connected together on the outside of the heating chamber, substantially as herein shown and described.

63,238.—EVENER FOR WHIFFLETREE, ETC.—Merritt Gally, Marion, N. Y.
I claim the body of the evener, A, with stops, E, E', the projecting levers, C, C', and pivoted bars, B, B', E', combined and constructed as herein set forth for the purposes mentioned.

63,239.—CAR COUPLING.—J. B. German, Walnut Hills, Ohio.
First, I claim the self-releasing car coupling, composed of the draw head, A, reversely hooked bar, B, formed with shoulders, c, c', the spring, D, and coupling pin, E, combined and adapted to operate in the manner set forth.

Second, The combination of the reversely hooked bar, B, spring, D, and coupling pin, E, constructed and arranged to operate, substantially as set forth.

Third, The connecting bar, B, having reversely directed hooks, b, b', and shoulders, C, C', and capable of instant release when in direct line by withdrawal of the coupling pin, E, or by advance of the lever, E', or when out of direct line by the automatic action of the parts in the manner set forth.

63,240.—MELTING AND SMELTING FURNACE.—Jacob Green, Norristown, Pa.
First, I claim subjecting ores to the action of the products of combustion, in a furnace where the gases are confined under pressure, substantially as and for the purpose described.

Second, The combination with a smelting furnace of pipes through which currents of steam and air can be introduced among the products of combustion previous to the latter being brought into contact with the ore for the purpose specified.

Third, A blast pipe so arranged in respect to the hearth and the fireplace of a smelting furnace, as to direct the products of combustion in a blast on to the hearth for the purpose set forth.

Fourth, A chamber of chambers, H, through which the ore is admitted to the furnace, when the said chambers are arranged in respect to the bed and to the fireplace, substantially as specified.

Fifth, The fireplace, D, bed, F, stack, G, inclined passage, H, with its openings, substantially as and for the purpose set forth.

Sixth, The combination of the two fireplaces, D, D, stacks, G, passages, H, H, beds, F, F', and basin, E, the whole being constructed and arranged substantially as specified.

63,241.—GLASS FURNACE.—Jacob Green, Norristown, Pa.
First, I claim subjecting the materials of which glass is to be formed, to the action of the products of combustion under air pressure by means within a furnace as set forth.

Second, The combination of a glass furnace with pipes so arranged, that the air and steam can be introduced among the products of combustion, and the latter are brought into contact with the contents of the pots or crucibles for the purpose specified.

Third, The combination with a glass furnace of a blast pipe and openings so arranged as to direct the products of combustion around the pots, substantially as set forth.

Fourth, The within described furnace consisting of the walls, A, A, B, B', with their openings, the top, C, sieve, a, and fireplace, E, the whole being constructed and arranged as described.

63,242.—LOCK FOR TRUNK, ETC.—Charles Gschwind and Charis Reichardt, Union Hill, N. J.
We claim the application to a lock of the dog, D, and its combination with the notched spring catch, B, and bolt, C, substantially as herein shown and described.

Second, We claim a lock which is so constructed that it can only be opened by placing the position of the key hole, substantially as and for the purpose herein shown and described.

63,243.—MACHINERY FOR NICKING SCREWS.—N. B. Hadley, Providence, R. I., assignor to The International Screw Company.
I claim uniting the spindle, D, with its driving power by means of the movable latch connection, e, or its equivalent arranged and operating substantially as described for the purpose specified.

63,244.—HORSE HAY FORK.—George W. Heath, Burlington Pa.
I claim in combination with the bars, A, D and G, the curved handle, E, and points or nukes, C, and F, when the same shall be constructed and operated substantially as shown.

63,245.—PASSENGER REGISTER.—William Helffricht, Philadelphia, Pa.
First, I claim the plates, h and h', arranged within the case respect to rollers, C, C', and slit, y, in front of the case, substantially as described.

Second, The combination of the roller, C, with the spring, b, for the purpose described.

Third, The plate, E, with its transverse slot, f, arranged within the case respect to the rollers, C, C', and slit, y, as set forth for the purpose specified.

Fourth, The sliding and guiding pins, I, secured to one portion of the case and adapted to holes in the other portion as and for the purpose herein set forth.

63,246.—COTTON CULTIVATOR.—Richard B. Henderson, Warren county, N. C.
First, I claim the frame, A, running on wheels, B, and operating in combination with the hoes, substantially as and for the purposes set forth.

Second, The crank, G, in combination with the handles, M, and hoes, N, and substantially as and for the purposes set forth.

Third, The hoe, N, when constructed and operating substantially as and for the purposes set forth.

Fourth, The hoe, O, when constructed and operating substantially as and for the purposes set forth.

Fifth, The hoe, P, when constructed and operating substantially as and for the purposes set forth.

Sixth, The extension frame, H, when constructed and operating substantially as and for the purposes set forth.

Seventh, The cultivator, Q, in combination with the machine herein set forth.

63,247.—STEAM GANG PLOW.—W. H. Heydrick, Chesnut Hill, Pa.
First, I claim the shaft, k, rotated by the clutch connection or by hand, as desired and operating by means of a spiral series of cams, to elevate the plow consecutively from the ground, substantially as described.

Second, The shaft, o, rotated by the clutch connection or by hand as desired, and operating by a spiral series of cams, to trip the dogs or their equivalent consecutively to lower the plows to the ground, substantially as described.

Third, The combination with the cam shafts, k, o, of the levers, g, and spring dogs, t, operating substantially as described.

Fourth, The director wheel, b', shaft, a', and bar, z, constructed and operating substantially as described.

Fifth, The bar, e', supporting the cord pulleys and adjustable by devices, substantially as described.

63,248.—ELEVATOR.—Edward Hicks, North Hemstead, N. Y.
First, I claim the application and use of the movable side plates, h, i, arranged and operating substantially as and for the purposes set forth.

Second, Supporting one truck of the car, so that it can rise and fall in respect to the car, substantially as and for the purposes set forth.

Third, The arrangement of the cross bar, k, or its equivalent for supporting the end of the car, substantially as and for the purposes set forth.

Fourth, The combination and arrangement of the pulley, r, and block, g, or their equivalent or elevating the bearing wheels, b, b, and releasing the car, operating substantially as set forth.

Fifth, The combination and arrangement of the block, g, spool, d, and supporting brace, l', or their equivalents, for holding and releasing the fork and load, and operating substantially as set forth.

63,249.—MANUFACTURE OF LEAD FOIL COATED WITH TIN.
Dauphin S. Hines, Brooklyn, N. Y. assignor to John J. Crooke, New York City.
I claim the process substantially as described for making foil of lead coated with tin on both sides by inserting a plug of lead within a pipe made of tin and then rolling the compound ingot thus formed, as set forth.

63,250.—TOOL FOR CUTTING OFF BOILER TUBES.—Peter Hoffman, Jersey City, N. J.
I claim a tool for cutting boiler tubes which is composed of a split or sectional bar, A, provided at one end with a boss, a, and at the opposite end with teeth, c, to operate in combination with a wedge, B, substantially as and for the purpose set forth.

63,251.—HOISTING APPARATUS.—George L. and William M. Howland, Topsham, Me.
First, We claim the pawls, G and I, arms, g' and i' and links, l and j, in combination with the spring lever, H, bars, A and B, and lever, D, all made and operating substantially as herein shown and described.
Second, The pawl, m, in combination with the pawls, G and I, and with the bar, B, substantially as and for the purpose herein shown and described.
Third, The pin, l, and pawl, m, in combination with the band, n, arm, g, and spring, p, all made and operating substantially as set forth.

63,252.—CARRIAGE CLIP.—Elias Hoxir, Montezuma, N. Y.
First, I claim the joint when formed by bending the two external joint pieces, C, C, on to the solid stand, D, as above set forth.
Second, In combination with the above, I claim the thill iron, A, when used as and for the purpose above described.

63,253.—SKIRT WIRE.—George W. Hubbell (assignor to himself, W. E. Houston, and J. R. Lattin), Birmingham, Conn.
I claim a cord or edge formed upon the wire from the same material with which the wire is covered, substantially as herein set forth.

63,254.—CONVERTING MOTION.—Wm. H. Hurlbut, Elgin, Ill.
I claim the spiral flanged cam, B, having its ends constructed as described, in combination with the cross head, A, and pins, a, of a steam engine, or with an equivalent part of any other motor, and with the shaft, C, the whole being constructed, arranged, and operated substantially in the manner and for the purpose set forth.

63,255.—NON-CONDUCTING COMPOSITION FOR COVERING BOILERS, ICE HOUSES, ETC., TO IMPEDE THE PASSAGE OF HEAT.—John Allcock Jones, Middlesboro on Tees, England.
First, I claim the application and use, for the purpose of impeding the passage of heat or caloric, of peat, turf, bog, silt, or other similar accumulations of vegetable or partly vegetable and partly earthy matter, either alone or in combination with other ingredients, as hereinbefore described.
Second, The molding of the said material or composition into cakes and bricks, and the subsequent application of the same, in that form, for the purpose specified.

63,256.—MANUFACTURE OF VINEGAR.—Gerhard Kamps, Pittsburgh, Pa.
I claim the mode of manufacturing vinegar from any vegetable substance containing saccharine or farinaceous qualities, as herein specified.

63,257.—STEAM-ENGINE LUBRICATOR.—Heinrick Kessley Caub City, Duchy of Nassau.
I claim the combination and arrangement of the tube, C, vessel, N, net work in the tube, F, valves, D and E, and the spring, G, substantially in the manner and upon the principle, as herein set forth.

63,258.—PRESS.—David King, Aberdeen, Ohio.
First, I claim the rack, O, gear wheels, J and K, in combination with the screw shaft, I, and wash, G, substantially as shown and described, and for the purposes set to.
Second, I claim the nut, P, made in sections, as herein shown and described, in combination with the shaft, I, wash, G, and posts, A and B, substantially as and for the purposes herein set forth.

63,259.—APPARATUS FOR DRYING STRAW BOARD, SHEETS OF PAPER, ETC.—Robert T. Knight, Philadelphia, Pa.
First, I claim a chamber communicating with a fan or other blowing or exhausting apparatus, and having any desired number of bars, D, D', or their equivalents, for the reception of detachable slats, F, or their equivalents.
Second, The construction and arrangement, substantially as described, of the lower slats, G, for the purpose specified.

63,260.—GANG PLOW.—H. P. Kynett, Lisbon, Iowa.
I claim the combination of the slotted cross piece, E, side piece, S, bolts, f, pendants, e, adjustable clevises, d, and beams, F, substantially as described for the purpose specified.

63,261.—MACHINE FOR POUNCING HATS.—John L. Labiaux, Newark, N. J., assignor to himself, C. Courtois, P. W. Vail, and Wm. C. Griswold, Newark, N. J., and N. B. Day and Julius Sheldon, New York City.
First, I claim the combination of the levers, e e', respectively with the shafts, E, E', spiral spring, g, block, G, or roller, H, substantially as and for the purposes herein shown and described.
Second, I claim the combination of the disks, C or C', and handle, I or I', with the pin, l, and flange, b or b', on the posts, B or B', all made and operating substantially as herein shown and described.
Third, I claim the combination of the metal pouncing roller, H, with the wedge, l, ring, m, and shaft, E', arranged to operate substantially as and for the purposes herein shown and described.

63,262.—DRILL SPRING FOR QUARRYING STONE, ETC.—Ebenzer G. Lamson, Shelburne Falls, Mass.
First, I claim, in combination with stone drilling or quarrying machines, a metal bow spring and metal strap or cord for carrying and sustaining a drill, substantially as described.
Second, I also claim connecting the metal strap or cord of the spring to a central, divided, and adjustable head, substantially as and for the purpose described.
Third, I also claim the combination of the spring, strap, drill stock, and drill, substantially as and for the purpose described.

63,263.—EMBOSSING AND PERFORATING PAPER, ETC.—Chas. Lang, New York City.
I claim the new mode of manufacturing embossed and perforated goods out of paper linen, cotton-lined paper, paper mixed with cotton threads or linen threads, cotton cloth, linen cloth, or similar material, by means of the machine, substantially as described, the rollers, two of which contain the design, depressed and raised, and the third acting, by its pressure, as perforator, between which said rollers a strip of paper or other material is passed, and is embossed, perforated, and cut during its passage, substantially for the purpose set forth.

63,264.—WATER EJECTOR.—Henry S. Lansdell, New York City.
First, I claim the arrangement of the two or more water inlet pipes or nozzles, m, m, in relation with the nozzle, s, of the jet pipe and liquid-receiving chamber, substantially as and for the purpose specified.
Second, The combination with a steam siphon or ejector of an escape valve, n, applied to the jet pipe, G, for operation, substantially in the manner and for the purpose specified.

63,265.—MACHINE FOR MAKING PAPER ALLUMETTES.—B. B. Lehman, Lebanon, Pa.
First, I claim the circular saw or cutter, B, having knife-edged teeth operating substantially as and for the purpose herein described.
Second, In combination with the above, I claim the carrier, F, substantially as and for the purpose herein specified.
Third, I claim the creasing or pressing rollers, operating substantially as and for the purpose herein set forth.
Fourth, I claim the folder, D, in combination with the creasing and pressing rollers, substantially as and for the purpose herein set forth.
Fifth, I also claim the inclined plane, H, operating substantially as and for the purpose herein specified.

63,266.—PULLEY FOR BELTING.—Moses Lewis and Samuel Miller, Greenville, Conn.
We claim the tapering or conical pulleys, B E, over which the twisted belt, F, circulates, arranged on shafts, A, D, at right angles to each other, for the purpose described, in the manner specified.

63,267.—CHEESE BOX.—Nathaniel and Friend Lewis, Adams, N. Y.
We claim as a new article of manufacture a cheese box constructed of paper provided with a removable head, B', and a head, B, permanently secured to the lugs, C, which are made in one piece with the side of the box, and secured between disks, D, substantially as described.

63,268.—BOAT-DETACHING TACKLE.—Johann A. Libbertz, Hamburg, Germany.
I claim the vertical shaft, H, provided with the nut, J, lever, I, and the slide, K, having lateral arms, d, d, in combination with the arms, G, G, pivoted in the ears or lugs, F, on the plate, E, all arranged to operate in the manner substantially as and for the purposes set forth.

63,269.—LINIMENT.—John S. Lightner, Westford, Wis.
I claim the liniment compounded as above set forth and described.

63,270.—WIRE-POINTING MACHINE.—John Lockwood, Wilton, Conn., assignor to himself and Edwin Gilbert, Redding, Conn.
I claim the improved wire-pointing machine herein described, consisting of the frame shaft pulley, cutter head, and cutter, all constructed, arranged, and operating substantially as described.

63,271.—KEY.—C. E. Lombard (assignor to himself, A. O. Sinclair, and C. C. Merritt), Springfield, Mass.
I claim as a new article of manufacture a key formed of two parts, A and B, constructed and arranged so that the handle, B, shall close over the opening in the shaft, A, substantially as set forth.

63,272.—CLOTHES WRINGER.—David Lyman, Middlefield, Conn.
First, I claim in clothes wringers the within-described construction and arrangement of the grooves, M, N, and intermediate piece, E X Y, combined and arranged relatively to the shafts, B A and D, so as to communicate the motion and withstand the wear, substantially in the manner and for the purpose herein set forth.
Second, I claim the piece, C C', constructed and arranged as represented, to hold both the shafts, A and B, so as to transmit the motion as represented and to maintain the shafts at a uniform distance apart however much the

other parts may move relatively thereto, substantially in the manner and for the purpose herein specified.

63,273.—CLOTHES WRINGER.—David Lyman, Middlefield, Conn.
First, I claim in combination with the shafts, c, d, cranks, e', d', and connecting rod, G, or swiveling guide, H, operated so as to retain the central position, closing the greater or less divergence of the shafts, substantially as and for the purpose herein set forth.
Second, I claim in a clothes wringer having diverging jaws, a spring operating on both pairs of jaws and acting as both spring and brace therefor, substantially as herein set forth.
Third, I claim in a clothes wringing machine, substantially as herein described, the gripping arm, L, and spring, K, operating substantially as herein set forth.

63,274.—TABLE-LEAF SUPPORT.—John A. MacKinnon, Reading Pa.
I claim the straight levers, A, hinged at one end and notched at the other, when constructed, combined, arranged, and operated by the lever catch, G, spiral spring, H, and button, K, as herein described and for the purposes set forth.

63,275.—METAL CASE FOR SPRING BOLTS.—Eli J. Manville, Waterbury, Conn., assignor to Turner, Seymour & Juds, Wolcottville, Conn.
I claim the combination of the mandrel, a, and dies, b c d and e, to which movements are communicated in substantially the manner specified for bending up a sheet-metal case with flanges at its ends, as set forth.

63,276.—PLOW.—Seth March, Norfolk, Va.
I claim the frame, the mold board, the heel, D, and the weeder, substantially as described.

63,277.—CAR COUPLING.—Arthur McCarter, Lancaster, Pa.
I claim the combination and arrangement of the slotted casing, A, with its vertical standards, B, B', cross arm, d, of pin, C, when operating in a vertical slot, D, with a terminal recess, D', together with a stationary or yielding stand post, F, with its link notch, g, all arranged and operating in the manner and for the purpose specified.
I also claim the cross arm, d, on the pin, C, in combination with the upright standards, B, B', when slotted in the manner and for the purpose shown.
I also claim the yielding stand post, F, with its link slot, in combination with the collared spring, H, constructed and operating in the manner shown, for the purpose described.
I also claim the prolongation or jaws, E', of the flared mouth, E, in combination with the open case, A, when constructed in the manner and for the purpose shown and set forth.

63,278.—SWING.—John A. McClain, Philadelphia, Pa.
First, I claim the vibrating frame, P O O' P, and springs, S S', whether metallic or otherwise, when constructed and combined in the manner and for the purpose above described and set forth.
Second, The combination of upright, A, A', and vibrating frame, P O O' P, rope and foot board, m, m', and springs, S, S', and seats, S, S', and S, S', and S, S', the whole combined and constructed for the purpose in the manner aforesaid described and set forth.

63,279.—MACHINE FOR MAKING FRUIT BASKETS.—Henry Mellish, Walpole, N. H., assignor to David Lyman, Washington Whitney, and Gilman Waite.
First, I claim the cutter, H, constructed substantially in the manner and for the purpose above specified.
Second, I claim the hollow cylinder, C, in combination with the main cutter, H, arranged to operate substantially in the manner and for the purpose above set forth.
Third, I claim the head cutter, I, when in combination with the main cutter, H, substantially in the manner and for the purpose above described.
Fourth, I claim revolving a log against a cutter or cutters arranged to move gradually in a direction parallel to its axis, for the purpose of cutting a helical coil suitable to be divided into pieces that, when sprung from their helical form to a circular one and properly fastened, they will constitute fruit baskets, pots, or bowls with the bottoms on, substantially in the manner as above described.

63,280.—MACHINERY FOR CUTTING THE BOTTOM OF FRUIT BASKETS.—Henry Mellish, Walpole, N. H., assignor to David Lyman, Washington Whitney, and Gilman Waite.
First, I claim the grooving cutter, C, so mounted on the quadrant or plate, C, on the head, B, that it may be moved inward thereon and produce an undercut groove adapted to receive and hold the properly formed material driven therein, substantially in the manner and for the purpose herein set forth.
Second, I claim the rod, E, in combination with the hollow arbor, A, and the cutter, D, adapted to operate the plate, C, with its cutters, C1 C2 C3, and move it inward when required, substantially in the manner and for the purpose herein set forth.

63,281.—STEAM ENGINE.—J. V. Merrick, Philadelphia, Pa.
First, The combination of the annular cylinder, A, its piston, E, two or more piston rods, m, m', plate of cross head, K, rods, n, n, cross head, G, connecting rod, l, and crank, h, the whole being arranged and operating substantially as and for the purpose herein set forth.
Second, The combination of the above with rods, m' m', for the purpose specified.

63,282.—CHURN.—Daniel E. Merrill, South Paris, Me.
First, I claim making the horizontal arm, d', of the standard, D, adjustable so that it may be extended or contracted, substantially as herein shown and described and for the purpose set forth.
Second, The combination of an adjustable slide or socket, J, with the balance wheel, G, for the reception of the end of the arm, K, adjustably attached to the dasher handle, E, substantially as herein shown and described and for the purpose set forth.
Third, Combining an air pump, m, with the churn, A, in such a way that the discharging pipe, m', of said pump may enter the churn through the middle part of its bottom, substantially as herein shown and described.

63,283.—PAINT CAN.—Hermann Miller, Hoboken, N. J.
I claim a wooden cover, B, which is screwed to the paint can, A, for the purpose of easily opening and reclosing the same, substantially as herein shown and described.

63,284.—STREET CROSSING AND SEWER INLET.—Joseph A. Miller, New York City.
First, I claim the arrangement of a trough the bottom of which slopes down from its ends toward the middle, in combination with a street crossing made of perforated plates of metal or other suitable material and with a pipe extending from the lowest part of the trough down into the sewer, substantially as and for the purpose described.
Second, The sewer inlets, b, and aprons, c, at the ends of the trough, B, in combination with the pipe, C, extending from the lowest portion of the trough down into the sewer, D, substantially as and for the purpose set forth.
Third, The application of the stench trap, E, in combination with the pipe, C, sewer, D, trough, B, and crossing, A, all constructed and operating substantially as and for the purpose described.

63,285.—PACKING FOR PISTON RODS.—Wm. H. Miller, Philadelphia, Pa.
I claim a new manufacture consisting of packing composed of a filling of fibrous material, such as cotton, woolen, or other yarn, saturated with powdered soapstone or equivalent material and wound around the filling, substantially as shown and described.

63,286.—PORTABLE BOILER FOR PITCH, ETC.—Luke S. Mills, Brooklyn, N. Y.
First, I claim a portable boiler formed with an arched fire chamber, and an exterior shell contracted toward the top and for the purposes specified.
Second, I claim a portable boiler formed with slides to set down upon the earth or pavement, an arched fire chamber provided with doors at the ends, a smoke pipe or flue passing off from the top of the fire chamber through the boiler, and a movable cover to give access to the contents of the boiler, substantially as set forth.
Third, In combination with a portable boiler formed as aforesaid, I claim the jacket of felt, and cover, l, as set forth.

63,287.—HEATING STOVE.—Geo. R. Moore, Lyons, Iowa.
First, I claim the insulation of the tops of heating stoves, substantially in the manner and for the purposes set forth.
Second, The chamber in the front part of the stove between the door, E, and upper part of plate, H, when constructed and arranged as and for the purpose set forth.
Third, The flue from the fire chamber through the front upper chamber to chamber in top of the stove, with the controlling dampers, arranged substantially as and for the purpose set forth.

63,288.—FARM GATE.—D. S. Neal (assignor to himself and J. B. Blood), Lynn, Mass.
I claim a rectangular gate the bars of which are relatively fixed, hung, and operated as described, by supporting it upon a pin, c, and guiding, A, in its vertical swinging movements by means of the vertical slot in the upright, substantially as set forth.

63,289.—SHIP'S DAVIT AND WINCH.—D. P. Nickerson, Cleveland, Ohio.
I claim the adjustable sliding davit, A, pinions, C, as arranged in combination with the adjustable shaft, D, catch, E, and winch, H, for the purpose and in the manner substantially as set forth.

63,290.—FIELD FENCE.—A. W. Olds, Green Oak, Mich.
I claim the posts or stakes, A, A, base, B, in combination with the braces, C, C, and tie, E, when arranged in relation to each other and the rails, D, as and for the purpose set forth.

63,291.—SAFETY ATTACHMENT FOR POCKET BOOKS.—Simon B. Parker, New York City.
I claim a safety attachment for pocket books, composed of a sliding needle, C, arranged and applied substantially in the manner as herein shown and described.

63,292.—BOOTJACK.—Walter S. Piffer, Carlisle, Pa.
I claim a bootjack with the two parts hinged together at F, and the part, B, hinged to a movable piece, D, acted on by any suitable spring, substantially as specified within.

63,293.—WATER-TIGHT IRON TANK FOR THE PROTECTION OF THE TIMBERS OF STEAM BOATS.—Abraham G. Polhams, Nyack, N. Y.
I claim the construction of the water-tight iron tanks in which are maintained a constant change and circulation of water as the foundation of boilers

and furnaces on steam boats, to protect them against fire, substantially as herein described.

63,294.—MOP SQUEEZER.—E. P. Porter, Morrisville, Vt.
I claim the jaws, D, lever, H, and treadle, J, arranged and operated as herein described in combination with the movable platform, B, for the purpose set forth.

63,295.—DOOR LOCK.—E. D. Porter and G. W. Hallett, Waterford, N. Y.
First, We claim the spring catches, H, whether more or less in number in combination with the bolt, B when arranged together substantially as and for the purpose described.
Second, The catch, K, in combination with the bolt, B, substantially as and for the purpose specified.

63,296.—FENCE.—Aaron W. Pratt, Putneyville, N. Y.
I claim the sill, E, the posts, A, the cap, d, the pales, b, and the wire strands c, the whole arranged constructed and operating substantially as herein described.

63,297.—BRIDLE BIT.—Joshua C. Price, New Philadelphia, Ohio.
I claim the movable or sliding levers or slides, B B, when applied substantially as and for the purpose set forth and described.

63,298.—COMPOSITION FOR DESTROYING INSECTS.—Daniel R. Prindle, East Bethany, N. Y.
I claim the composition of coal tar and petroleum, in the manner and for the purpose herein specified.

63,299.—HYDRAULIC PAINT.—Daniel R. Prindle, East Bethany, N. Y.
I claim a paint composed of pulverized hydraulic lime and skim milk either with or without the addition of chrome, yellow, or other pigment, as herein specified.
In combination with the above I also claim the use of linseed flour, as set forth.

63,300.—PROCESS OF PRESERVING WOOD AND TIMBER.—Daniel R. Prindle, East Bethany, N. Y.
I claim the application of coal tar, common tar, or equivalent substance, or the ingredient thereof, to wood and timber successively, substantially as specified, as a new process of preserving the same.

63,301.—IRONING MACHINE.—P. O'Thayne, New York City.
First, I claim the construction and arrangement upon the frame, A, of the cylindrical revolving smoothing iron, D, hollow shaft, B, having its bearings in the yielding boxes, a, which are provided with the standards, c, adjustable forked lever, E, rod, d, and treadle, F, substantially as herein shown and described.
Second, The segmental platform, G, upon the end of the shaft, H, provided with the clamps, g, g, flatboard, G', having the toothed rack, l, pinion, J, mounted upon the shaft, l, when all are constructed and arranged upon the frame, A, as and for the purpose specified.

63,302.—WATER GATE.—Henry Recher, Liberty, Ohio.
I claim the arrangement and combination of the centrally-hinged gate, F, with the connecting rod, E', lever, C, and float, B, all constructed and operated substantially as described.

63,303.—BRECH-LOADING FIRE-ARM.—Thomas Restell, London, England, assignor to Charles Pomeroy Button, New York City, Antedated March 13, 1867.
I claim the reciprocating hammer, H, with its curved inclined plane, S, and spring lever, G, in combination with the sleeve, v, and tube, E, for operating the needle, d, substantially as described for the purpose specified.

63,304.—LEMON SQUEEZER.—August J. T. Reuter, Boston, Mass. Antedated March 18, 1867.
I claim a grooved nub or knob constructed substantially as above set forth for the purposes herein specified.

63,305.—SAFE LOCK.—John R. Richards (assignor to himself and A. L. Menez), Mount Joy, Pa.
First, I claim the twin sand boxes, A, A', or their equivalent gravitating force, and regulating key, H, for timing the period that shall intervene before the bolt, D, and bolts, W, can be operated so as to unlock the door by withdrawing or unscrewing the key, F, by turning the knob, F, substantially in the manner and for the purpose specified.
Second, The socket, screw bolts, W, D, operated substantially in the manner and for the purpose specified.

63,306.—SASH FASTENER.—Orville M. Ridgway, La Porte, Ind.
I claim the combination of the metallic spring, C, rubber block, D, when constructed and arranged upon each of the sashes, B, as herein set forth, for the purpose specified.

63,307.—LEATHER SCOURING MACHINE.—A. W. Roberts (assignor to P. Jewell & Sons), Hartford, Conn.
First, I claim the rotating plate, T, sliding plate, T', guide way, T'', or their equivalents, in combination with the table, S, to produce a transverse movement of the table with the guide ways, B'', substantially as described.
Second, In combination with the above I claim the table, S, to produce a universal horizontal movement of said table, substantially as described.
Third, I claim the employment of an oscillating, adjustable tool holder with the arms, H', for altering the angle of the tool, substantially as described.
Fourth, I claim the altering of the angle of the tool, with or without the use of the tool arms, H', by means of the adjustable shaft, H, or its equivalent, substantially as described.
Fifth, I claim the employment of the springs, K, secured to the arms, H', and bearing upon the tool holders, I, extending in an opposite direction from that to which the springs are secured, for the purpose of imparting pressure from one to the other, substantially as shown and described.
Sixth, I claim the alternate action of the springs, K, imparted from one to the other by raising either one of the arms from the table, substantially as described.
Seventh, I claim the arms, G, G, in combination with the arms, F, F', arms, E, rock shafts, F, F, and their connections, for lifting the tools from the table, substantially as shown and described.
Eighth, I claim arranging the arms, H', upon an independent shaft, H, to more perfectly utilize their action.
Ninth, I claim arranging the shaft, H, in adjustable or sliding boxes, A'', whereby it can be elevated by screws, c, c, or their equivalents, for the purpose as shown and described.
Tenth, I claim the employment of slide dogs, P'', or their equivalents, for holding up the tools from the work while the tool stock, C, is in motion.
Eleventh, I claim the employment of the screw e'', with t' e' arm, D, or their equivalents, for increasing the tension of the spring, K, substantially as described.

63,308.—TOOL HANDLE.—Wm. Runte, New York City.
I claim the combination of the plug, D, and the adjustable ferrule or tube, E, with the tool handle, substantially as and for the purpose herein shown and described.

63,309.—WAGON.—Benj. Ryder, Jr., South Covington, Me.
I claim the frame, G, which supports the reach and allows the wheels to be extended forward, substantially as described.
I claim the rollers, C, and the chain, h, arranged and operating substantially as shown and described, for the purposes specified, in combination with the wagon body.

63,310.—TOBACCO PIPE.—Louis Saarbach, Philadelphia, Pa.
I claim the tube, c, in combination with the cup, D, for the purpose described.

63,311.—FIRE-PROOF SAFE.—Rufus S. Sanborn, Ripon, Wis.
First, I claim introducing water vessels provided with steam valves into a fire-proof safe of any ordinary construction, said vessels being of such size and conformation as to adapt them to the form and dimensions of the safe in which they are placed.
Second, Providing each of such water vessels with a tube, t, reaching from any point on the edge or perimeter to or toward the mathematical center of the vessel, as and for the purpose specified.

63,312.—WAGON BRAKE.—B. B. Scofield, Woodhull, Ill.
I claim an improved brake formed by the combination of the revolving cylinder, A, curved shoes, C, and lever, D, with each other, substantially as herein shown and described and for the purpose set forth.

63,313.—BED BOTTOM SPRING.—H. G. Seekins (assignor to himself Leonard B. Griffing, and Orange S. Frary), Clyria, Ohio.
I claim a compound bed spring consisting of the middle leaves, A H' the upper leaves, B B', and lower leaves, C C', the several springs being supported by the fulcrum blocks, d, d', constructed and arranged as and for the purpose specified.

63,314.—SOAP COMPOUND FOR CLEANING AND SCOURING WOOL, SILK, ETC.—Daniel Shattuck, Buffalo, N. Y.
I claim a soap formed by the combination of the ingredients above described, substantially in the manner and proportions specified.

63,315.—FOLDING SEAT.—C. W. Sherwood, Chicago, Ill.
I claim the rubber spring, e, or its equivalent, and the lug, d, in combination with the axle, C, and nave, B', all constructed substantially as and for the purposes specified.

63,316.—FLOUR SIFTER.—J. A. Sinclair (assignor to himself and J. T. Judkins and W. Hollister, Woodfield, Ohio).
First, I claim the combination of the two cylinders, H and I, having lines of brushes, M, winding spirals around them in opposite directions with sliding drawers, E, substantially as herein shown and described for the purpose set forth.
Second, The drawer, E, consisting of two hinged parts, e1 and e2, with opening on its upper side, registering with the discharge orifice of the hopper having at its bottom the semi-cylindrical sieve, G, swept by the spiral brushes, M, and a passage at its rear opening into spout, N, and constructed and operating substantially as described for the purpose specified.
Third, The combination of the sliding drawer, E, with the box, A, hopper, B, and spout, N, substantially as herein shown and described.

63,317.—WINDOW BLIND FASTENING.—Thomas J. Sloan assignor to Ezra Gildersleeve, New York City.
First, I claim the hinge having bevel cog in combination with the shaft extending to the inside of the window provided with a bevel cog wheel, and the hinge shaft constituting the hinge joint on which the blind turns, and the bar in which the shaft turns, substantially as and for the purpose described.

